REMARKS

Favorable reconsideration of the application is respectfully requested in view of the following amendment and remarks.

The application contains Claims 1-45. Independent Claims 1, 11, 16, 24, and 29 have been amended to recite that the transformed images are displayed such that an operator is free from moving an eyepoint. Independent Claims 31-35 have been amended to recite similar language. Newly added dependent Claims 36-45 recite specific details of the transformation and depend from each of the independent Claims 1, 11, 16, 24, 29 and 31-35. The limitations of dependent Claim 2 have been added to Claim 1 and Claim 2 has been cancelled. No new matter has been added.

By way of summary, the Official Action dated June 3, 2008 presents the following issues. Claims 1, 3, 8, 16, 21, 29, 33 and 35 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nakajima et al. (U.S. Patent No. 5,623,560, hereinafter "Nakajima"). Claims 2, 9-10, 17, 22-23, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Sato et al. (U.S. Patent No 5,640,462, hereinafter "Sato"). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Rougee et al. (U.S. Patent No. 5,699,446, hereinafter "Rougee"). Claims 5-7 and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Chen et al. (U.S. Patent No. 6,047,080, hereinafter "Chen"). Claims 11, 24, 33 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Slack (U.S. Patent No. 6,487,432). Claims 12-15 and 25-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Slack and further in view of Sato.

For the reasons which follow, Applicant believes that Applicant's claims are neither taught nor suggested by the applied references.

Nakajima is directed to a method for adjusting pictures of radiation images. Nakajima discloses (Fig. 3) an X-ray image reading apparatus 10 an image processing and displaying apparatus 30. After the first X-ray image and the second X-ray image have been stored respectively on the first phosphor sheet 5 and the second phosphor sheet 7, the phosphor sheet 5 and the second phosphor sheet 7 are placed one after the other at a predetermined position on the X-ray read-out apparatus 10. The read-out apparatus includes the laser beam 17 which is reflected and deflected about a rotating polygon mirror 19. The image from sheet 5 is stored as a first image signal SO1 and the image from the second sheet 7 is stored as a second image SO2. The two image signals SO1 and SO2 is subjected to subtraction processing, and stored in a memory and display apparatus 30. As disclosed in Nakajima, at least two characteristic regions of interest are set in each of the X-ray images 4a, 4b as shown in Figure 2. In the image 4a, regions of interest are set as template regions 8 and 8', and in image 4b the regions of interest are set as reference positions 9 and 9'. The positions of the template regions are respectively matched to the positions of the reference numerals 9 and 9'. The coordinates in the first X-ray image are transformed by the affine transformation and the two X-rays are superimposed one on top of the other and are rotated, enlarged, or reduced etc. by the affine transformation (col. 14, lines 14-22 and 41-65).

Figures 7 and 8 illustrate an example of how X-ray image 14b is rotated, enlarged, or reduced and translated in parallel such that the position of the X-ray image 14b may coincide with the position of the X-ray image 14a. In the example of Figure 8, X-ray image 14b is rotated such that line I and line II have become parallel to each other. At this point, the X-ray image 14b may be rotated around any point such as the center of gravity 9c, the center of gravity 9d, or a point lying on the line II. In this manner, the positions of the two X-ray images 14a and 14b can be adjusted so they may coincide with each other. In this

embodiment the positions of the X-ray image 14a is adjusted to match with the position of the X-ray image 14b.

In summary, from our review of Nakajima we find that the two X-ray images are superimposed and adjusted so that they may coincide with each other. Thus, although Nakajima discloses coordinates which rely on centers of gravity (col. 19, lines 18-43) and which can be at the center of the image in some cases, we find no description of estimating, transforming and displaying the transformed images, as recited in each of Applicant's independent claims.

The present invention enables an observer to execute observation without moving their eyepoint, when observing a plurality of images collected while rotating the diagnostic apparatus around a subject. Namely, when the diagnostic apparatus collects images while rotating around a subject, the center of rotation may vary because of the weight of the image pickup system. If images obtained with the center of rotation varied are directly displayed, an object of observation is inevitably included in different areas of the images (obtained at different angles of rotation). Even in such an occasion, the present invention, in which a plurality of images are transformed so that a target of observation (i.e., a region of interest) will be positioned at a preset position on each image, enables the observer to successively observe the images without moving their eyepoint.

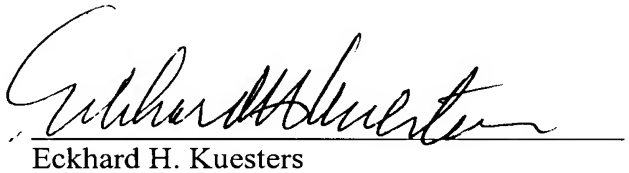
In contrast, Nakajima merely discloses parallel display or superposed display of images so as to facilitate the comparison of the images. Parallel or superimposed display of two images is not a description of estimating corresponding areas which correspond to the region of interest, on the remaining images of the plurality of images. Thus, Nakajima neither discloses nor suggests that "a plurality of images are transformed so that a target of observation will be positioned at a preset position on each image, in order to enable the observer to successively observe the images without moving their eyepoint." Accordingly,

Applicant believes that the independent claims are no longer anticipated by Nakajima. In addition, the Official Action does not point to any suggestion or teaching in the remaining references to Sato, Chen, and Slack, that would make up for the basic deficiencies of Nakajima.

From all of the above, Applicant believes that each of the claims are now in condition for allowance and an early indication to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Registration No. 28,870
Stuart S. Levy
Registration No. 61,474
Attorneys of Record

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)
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